Milwaukee Meeting Summary – July, 1998

Over 150 Members, participants, and observers representing state, tribal, and local governments, regional groups, industry, professional organizations, and the Department of Energy, met to address a variety of issues related to DOE's transportation activities for radioactive materials. A number of Departmental Programs with transportation components were represented, including: the Office of Environmental Management, the Office of Civilian Radioactive Waste Management (including the Yucca Mountain Project Office), the Office of Naval Reactors, the Waste Isolation Pilot Project, and the Office of Defense Programs.

Topic Group Summaries & Comments

Mechanics of Funding & Technical Assistance

- Group was designed to review and address funding and implementation mechanisms available to support resource needs of emergency responders
- In January 1998, the Topic Group presented its matrix and comments on issues of funding; remarks included DOE should examine feasibility of providing umbrella grant to states and tribes
- Group supports DOE commitment to continued funding for state and regional government groups for early planning for shipments
- Topic Group is now closed

Rail Issues

- Regulatory and inspection matrices completed and available
- Group presented a timeline of actions taken on initial seven items tasked to it; has addressed and/or tabled each of the seven items
- Group now in process of addressing final item (raised internally), a review of the Waste Isolation Pilot Project Program Implementation Guide (WIPP-PIG) as it relates to rail shipments
- Group hopes to complete draft of this review by January 1999

Training

- Group discussed status of Transportation Emergency Preparedness Program activities in developing national training material
- Training material in transition from Phase I, development of the front-end analysis (which was completed in July 1997), to identification of modules to address radmat transportation
- Group reviewed first draft of Modules 1-8
- Group provided with final draft video and written material of the Radioactive Materials Basics for Emergency Responders

Medical Training Issues

- Specialty subgroup of Training Topic Group; examines capabilities of emergency medical services, law enforcement, and fire services in transitioning patients to medical facilities and personnel
- Group agreed on need to develop a "demonstrable" set of skills based on job performance
- Group developing a planning document, available September 1998

Tribal Issues

- First "face-to-face" meeting of Topic Group
- Group developing process to identify appropriate participants; working on a protocol for identifying and inviting individual tribes
- Group identified five actions:
  (1) catalogue tribal transportation issues
  (2) identify a level of tribal awareness of DOE transportation issues (3) examine funding and tribal support
  (4) develop a process for Tribal Topic Group membership
  (5) review the best channels to disseminate transportation information to tribes

Communications

- First "face-to-face" meeting of Topic Group
- Group reviewed preliminary results of survey on state and local notification, researched and developed by UETC staff
- Participants recommended survey be completed and UETC staff work with TEC/WG members representing local officials (i.e. ECA, NACo, and ICMA, etc.) to capture and include more local perspectives in final report
- Group discussed draft Senior Executive Transportation Forum (SETF) DOE Transportation Contacts brochure; proposed a number of changes and planned conference call to review proposed changes
- University of New Mexico/Alliance for Transportation (ATR) presented outline of its new project for the National Transportation Program, the Transportation Resource Exchange Center (T-REX)
- Topic Group discussed development of a "strawman" set of guidelines for standardized transportation messages, to be accompanied by a standardized TEC/WG review worksheet accompanying each draft information product

Routing

- Group presented brief summary of recently completed paper Routing Issues Related to U.S. Department of Energy Radioactive Materials Transportation: Discussion and Analysis
- Paper reviewed HM-164 and discussed how and why it was promulgated; reviewed DOE policies and responsibilities; and discussed routing concerns of states, tribes, local governments, and environmental groups
- Report forwarded to Senior Executive Transportation Forum (SETF) for consideration

DOE Program Office Discussions

Office of Naval Reactors/Naval Nuclear Propulsion Program (Ray English)

- Program is an integrated effort by the Departments of Energy and the Navy; tasked by statute with "cradle-to-grave" responsibility for 114 operating reactors necessary for propulsion of 94 naval vessels
- Broad responsibilities of the program include:
  (1) research, development, and design;
  (2) acquisition, specification, construction, and testing;
  (3) operation, training, and maintenance;
  (4) overhaul, refueling, and disposal;
  (5) ensuring reactor safety, including provision of radiological controls and maintenance of environmental and public health standards;
  (6) security and safeguards in transportation; and
  (7) public information
- Program has unblemished record in 50 years of naval operations; includes 113 million miles safely steamed and 4,900 reactor-years
- Since 1957, 698 shipments of spent fuel have been moved without incident, by rail, in Type B containers
- Program shipping practices include:
  (1) providing on-board, specially trained Navy couriers (to serve as first responders and traffic managers);
  (2) constant satellite surveillance;
  (3) train speeds limited to 35 m.p.h.; and
  (4) pre-arranged briefings with state law enforcement and emergency management officials
- Program is committed to premise that rail is the safest mode for transporting radioactive materials; believes economic incentives inherent in (closed) rail system are primary factor ensuring safety and security of rail mode

Office of Civilian Radioactive Waste Management (James Carlson)

- OCRWM anticipates realignment (effective July 19, 1998) as a result of May RIF, which eliminated Storage Division, transferred contract management to Yucca Mountain Project Office, and integrated systems engineering functions into Waste Acceptance Division
- OCRWM budget issues:
  (1) appropriations have been in decline
  (2) For FY99, OCRWM has requested $380 million
  (3) current Senate markup $375 million; House mark is $350 million
- OCRWM legislative issues:
  (1) H.R. 1270, (introduced April 10, 1997) directs the Secretary of Energy to operate a permanent repository at Yucca Mountain (if suitable) by January 17, 2010
  (2) Bill was recently subject of a Senate motion to invoke cloture; Senate voted 56-39 in favor, four votes short of the 60 required
  (3) OCRWM is nevertheless in the midst of developing a site proposal plan by 2001
- Waste Acceptance/Utility Contract Litigation Timeline detailed recent events surrounding 1996 announcement that DOE could not meet January 31, 1998 acceptance deadline; to date 8 utilities seeking redress in the Court of Federal Claims
- Discussed concept, layout, and progress of the proposed Yucca Mountain repository

- Presentation of timeline entitled "Pathway to Geologic Disposal", which displayed the completion dates for major events such as:
  (1) the Viability Assessment (1998)
  (2) the Environmental Impact Statement (2000)
  (3) Site Recommendations (2001)
  (4) the NRC Licensing Application (2002)
  (5) construction authorization (2005)
- OCRWM scheduled to deliver draft Viability Assessment to Secretary of Energy in September, 1998
- Transportation: comment period on draft RFP released in November 1997 closed on April 13, 1998; 261 comments were received from 32 different organizations
- Section 180(c) actions: Revised Proposed Policy & Procedures re-issued April 30, 1998, with 19 sets of comments incorporated since initial issuance in July 1997
- Funds for technical assistance under Section 180(c) would be implemented through a grants program

Senior Executive Transportation Forum (Kelly Kelkenberg)

- Main goals of the Forum:
  (1) establish a clear set of operating/management procedures
  (2) improve coordination, communication, and integration across DOE programs, with stakeholders and with other federal agencies
  (3) improve level of confidence in safety of transportation activities
- Forum was established in January 1998 by Secretary of Energy to address and resolve common transportation issues across programs at the senior management level
- Forum works primarily through issue-specific work groups
- Some of the key issues being addressed include:
  (1) perception that a fragmented approach to planning and implementation, intergovernmental relations and agreements, and emergency response training exists
  (2) perception there have been lapses or breakdown in notification procedures
  (3) the need to ensure that the necessary infrastructure is available to handle significant increases in shipments;
  (4) public concern about shipment safety and routing
- Current efforts of the Forum:
  (1) development of a standardized set of transportation protocols
  (2) development of a cooperative working agreement with the Department of Transportation (including an ex officio member from DOT on the SETF)
  (3) enhanced public outreach and communication products
  (4) greater involvement of corridor jurisdictions in emergency response training
  (5) studying the feasibility of providing funding and technical assistance through some type of "umbrella" grant
  (6) resolving the request for a "single point-of-contact"

Office of Defense Programs/Tritium Project Office (Lew Steinhoff)

- According to Presidential directive, DP needs to find a new source of tritium by 2005

- Two sets of transportation activities being planned simultaneously by the Tritium Project Office--activities pertaining to Lead Test Assemblies and activities related to production
- The near-term goal for Lead Test Assemblies (LTAs) is to accomplish all activities necessary to complete transportation of four irradiated Assemblies to Argonne National Laboratory by July 1999
- Related to production, the goal is to complete transportation activities for up to 4000 irradiated Tritium-Producing Burnable Absorber Rods (TPBARs) annually from their respective reactor(s) to Savannah River Site beginning in FY2005
- Mr. Steinhoff added that the CLWR EIS is currently undergoing internal DOE review and will be released for public comment in August 1998

Waste Isolation Pilot Plan [WIPP] (Tim Sweeney)

- As of May 1998 WIPP has received certification from the Environmental Protection Agency (EPA)
- WIPP is able to receive non mixed-waste shipments, although no such shipments have yet been made
- Carlsbad Area Office expects to receive a RCRA (Part B) permit from New Mexico by next spring
- CAO expects additional lawsuits will commence immediately following receipt of that permit

General Planning Breakout Discussions

Fernald White Box Incident

- Shipment in question was low-level waste, originating at the Fernald plant in Ohio and destined for interim storage at the Nevada Test Site
- On December 15, 1997 at a truck stop near Kingman, Arizona a leak was discovered beneath a stopped trailer; emergency response teams determined that there was no significant release of radioactivity into the environment
- Type B accident investigation was commissioned by EM-1 which culminated in a report released February 4, 1998
- General finding in the report was that the contracting process with Fluor Daniel Fernald did not deliver a packaging of the strength required in the contract's specifications
- Major flaws inherent in the contracting arrangement with Fernald that contributed to the incident as determined by the investigation were:
    - the package in question was kept in service despite previous failure;
    - there was a lack of rigor and formality in DOE oversight of the contracting process;
    - there was a failure to provide appropriate attention to the shipment in question because of the perception of a relatively low hazard level involved; and
    - there was a lack of knowledge by the contractor of the character of the waste stream.

As a follow-on to the incident, EM-1 instituted the following requirements for sites to meet when certifying containers:

- ensure the appropriate absorbents are used;
- ensure the package design is appropriate for particular waste materials;
- certify the package's performance to design specificationss;
- institute the appropriate packaging inspection upon acceptance of material; and
- incorporate "lessons learned" from this incident into future certifications.

EM-1 has commissioned a Strong, Tight Container Working Group to review items related to packaging. STC working group promulgated the following set of complex-wide recommendations:

- ensure contractor compliance with DOT regulations, DOE orders, and receiving site acceptance criteria;
- establish a more regimented and participatory package procurement process;
- use Industrial Packaging standards and specifications as a baseline for shipping Low Specific Activity (LSA) waste;
- ensure waste complies with DOT solids test (the materials were frozen upon leaving Ohio, but melted while on the ground in Arizona--the working group determined that this may be attributable to the use of the more lenient RCRA test);
- ensure wastes are properly stabilized (the Fernald shipment had used an improper absorbent);
- initiate standardization of packaging specifications—each site currently has own authority to do so;
- establish a standardized waste verification process at receiving sites;
- establish an independent process of verification that mandated corrective actions are implemented; and
- establish an enhanced reporting system for breached containers.

DOE Transportation Protocols

- 17 protocols were developed and grouped into four topical areas: I. Pre-shipment; II. Shipment; III. Post-Shipment; IV. Accident/Incident
- Department will attempt to standardize the protocols for use across the complex by employing a three-phased process of data collection, data standardization, and development of recommendations for DOE senior management
- 17 protocols identified to date, by group:

Pre shipment	Shipment	Post shipment	Accident/Incident
Pre-notification	Weather & road conditions		Notifications
Emergency plans	Tracking		Emergency response
Routing	Safe Parking/safe haven		Crisis communication
Public information			Remediation
Inspections			
Carrier/driver requirements			
Training			
Equipment			
Security			

- A set of "validated protocols"—what the programs are currently using—were gathered from the various programs
- Phase III ("Recommendations") includes sharing the validated, draft recommendations with external stakeholders; participants were asked to offer suggestions for effective mechanisms to

obtain such input before recommendations are presented to the Senior Executive Transportation Forum

- Timetable for completion of phases toward obtaining draft recommendations, listed by group:

	Phases I & II	Phase III
Group I	July 8, 1998	August 12, 1998
Group II	August 12, 1998	September 10, 1998
Group III	September 10, 1998	October 13, 1998
Group IV	October 13, 1998	November 16, 1998

- Protocol "drivers":
  (1) maintain compliance with federal and state laws
  (2) ensure the safety of the public, DOE workers, and the environment
  (3) allow program offices to better carry out their individual missions
  (4) continue partnership with communities along transportation corridors

DOE-NV Environmental Assessment for Inter-modal Transportation

- Resolutions passed by the cities of Las Vegas, North Las Vegas, and Boulder City, Nevada requesting the Department avoid particular areas such as the Hoover Dam and the metropolitan Las Vegas valley when routing low-level waste through Nevada
- Currently 15 approved generator sites shipping to NTS, all by highway
- FY98 shipments projected at 600,000 cubic feet; actual shipments will total 300,000 cu. ft. because of temporary interruption in Fernald shipments
- 80% of the LLW shipments to the Test Site follow US-93 over the Hoover Dam, which is designed for a maximum speed of 20 m.p.h. and is subjected to 10,000 crossings per day
- Traffic congestion in Las Vegas: approximately 300,000 vehicles daily, augmented by ongoing $100 million construction project in the "Spaghetti Bowl"
- The five alternatives considered in the Environmental Assessment were:

No Action—continue to transport according to the status quo
Inter-modal transfer at Caliente, Nevada
Inter-modal transfer at Barstow, California
Inter-modal transfer at Yermo, California
All highway routing, avoiding the Hoover Dam and the Las Vegas valley

- Environmental Assessment pre-approval draft will be available on September 1st
- Information briefings given to stakeholder groups from August through October
- review period formally closing on October 30th; anticipated the EA will be released in final form following publication of the WMPEIS Record of Decision

Discussion of Task Plans/Additional Discussion

TO-21: "Infrastructure Upgrades"

- Task Plan was originally developed when OCRWM was considering the use of substantially heavier casks, and then evolved to look at the question of using NWPA funds for infrastructure improvement

- Senior OCRWM staff had again requested consideration of the issue of transportation infrastructure upgrades by DOE General Counsel; General Counsel's response was that it was premature for OCRWM to consider such improvements
- Participants requested the task plan remain open, particularly because states must plan capitol improvements ten years in advance and need some resolution of this issue in the immediate future
- Participants commented that if OCRWM has a storage plan for a facility, it is illogical to ignore the transportation component; they requested the issue be brought to the Senior Executive Transportation Forum, with the understanding that the TEC/WG does not find the General Counsel's response satisfactory

Additional Discussion

1. One participant suggested the Routing Topic Group and Task Plan TO-22 be re-opened to examine the use of the paper and the implementation of its recommendations. It was determined that the routing paper will be instrumental in the development of a routing protocol by the SETF; participants endorsed this approach.
2. A participant commented that WGA had recently adopted a resolution calling for a re-examination of security surrounding high level waste shipments by the NRC and DOE. He said that he would like to see a Task Plan developed along these lines, as well as a plenary session on security planning presented by DOE, its contractors, and possibly NRC or FBI representatives.